

Amendments to the Claims:

1. (Currently Amended) A process for the preparation of a water-absorbent polymer which comprises:

(I) polymerizing a polymerization mixture comprising:

- (a) one or more ethylenically unsaturated carboxyl-containing monomers,
- (b) one or more crosslinking agents,
- (c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer,
- (d) a polymerization medium, and
- (e) a chlorine- or bromine-containing oxidation agent to form a crosslinked hydrogel;

(II) comminuting the hydrogel to particles; [[and]]

(III) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C[[.]] to form dried water-absorbent polymer particles and

(IV) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;

wherein from about 1 to about 3 ppm, based on the weight of monomers (a), (b), and (c), of Fe(II) ions or Fe(III) ions or a mixture of both are added to the hydrogel prior to, during or after the comminution step (II) but prior to ~~substantial~~ drying of the hydrogel in step (III).

2. (Currently Amended) A process for the preparation of a water-absorbent polymer which comprises:

(I) polymerizing a polymerization mixture comprising:

- (a) one or more ethylenically unsaturated carboxyl-containing monomers,
- (b) one or more crosslinking agents,
- (c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer,
- (d) a polymerization medium, and
- (e) a chlorine- or bromine-containing oxidation agent to form a crosslinked hydrogel;

(II) comminuting the hydrogel to particles; and

(III) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C[[.]] to form dried water-absorbent polymer particles and

(IV) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;

wherein Fe(II) ions or Fe(III) ions or a mixture of both are added in an amount of from 1 to 3 ppm, based on the total weight of monomers, to the polymerization mixture prior to step (I).

3. (Currently amended) A process for the preparation of a water-absorbent polymer which comprises:

(I) polymerizing a polymerization mixture comprising:

- (a) one or more ethylenically unsaturated carboxyl-containing monomers,

- (b) one or more crosslinking agents
 - (c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer,
 - (d) a polymerization medium, and
 - (e) a chlorine- or bromine-containing oxidation agent to form a crosslinked hydrogel;
 - (II) comminuting the hydrogel to particles; and
 - (III) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C[[.]] to form dried water-absorbent polymer particles and;
 - (IV) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;
- wherein from about 1 to about 3 ppm, based on the weight of monomers (a), (b), and (c), of Fe(III) ions are added to the polymerization mixture prior to step (I).

4. (Currently amended) A process for the preparation of a water-absorbent polymer which comprises:

- (I) polymerizing a polymerization mixture comprising:
 - (a) one or more ethylenically unsaturated carboxyl-containing monomers,
 - (b) one or more crosslinking agents,
 - (c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer, and
 - (d) a polymerization medium to form a crosslinked hydrogel;
- (II) comminuting the hydrogel to particles;

(III) applying to the hydrogel a chlorine- or bromine-containing oxidation agent prior to, during or after the comminution step (II); and

(IV) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C~~[[.]]~~ to form dried water-absorbent polymer particles and;

(V) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;

wherein Fe(II) ions or Fe(III) ions or a mixture of both are added to the hydrogel after the comminution step (II) but prior to substantial drying of the hydrogel in step (IV).

5. (Currently amended) A process for the preparation of a water-absorbent polymer which comprises:

(I) polymerizing a polymerization mixture comprising:

(a) one or more ethylenically unsaturated carboxyl-containing monomers,

(b) one or more crosslinking agents,

(c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer, and

(d) a polymerization medium to form a crosslinked hydrogel;

(II) comminuting the hydrogel to particles;

(III) applying to the hydrogel a chlorine- or bromine-containing oxidation agent prior to, during or after the comminution step (II); and

(IV) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C~~[[.]]~~ to form dried water-absorbent polymer particles and;

(V) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;

wherein Fe(II) ions or Fe(III) ions or a mixture of both are added in an amount of from 1 to 3 ppm, based on the total weight of monomers, to the polymerization mixture prior to or during step (I).

6. (Currently amended) A process for the preparation of a water-absorbent polymer which comprises:

(I) polymerizing a polymerization mixture comprising:

(a) one or more ethylenically unsaturated carboxyl-containing monomers,

(b) one or more crosslinking agents,

(c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer, and

(d) a polymerization medium to form a crosslinked hydrogel;

(II) comminuting the hydrogel to particles;

(III) applying to the hydrogel a chlorine- or bromine-containing oxidation agent prior to, during or after the comminution step (II); and

(IV) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C to form dried water-absorbent polymer particles and;

(V) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;

wherein from about 1 to about 3 ppm, based on the weight of monomers (a), (b), and (c), of Fe(III) ions are added to the polymerization mixture prior to step (I).

7. (Currently amended) The process of claim 1 further comprising (IV) grinding, screening and heat treating the dried ~~hydrogel~~ water-absorbent polymer particles after step (III).

Claims 8-16 (Canceled)

17. (Previously presented) The process of claim 1 wherein the Fe(II) ions are derived from iron (II) acetate, iron (II) chloride, iron (II) sulfate, iron (II) acetate, iron (II) bromide, iron (II) citrate, iron (II) lactate, iron (II) nitrate, and mixtures thereof.

18. (Previously presented) The process of claim 1 further comprises a surface crosslinking step after step (III).

19. (Previously presented) The process of claim 1 wherein the Fe(III) ions are derived from iron (III) chloride, iron (III) sulfate, iron (III) bromide, iron (III) citrate, iron (III) lactate, iron (III) nitrate, iron (III) oxalate, and mixtures thereof

20. (Canceled)

21. (Previously presented) The process of claim 1 wherein the chlorine- or bromine-containing oxidizing agent is selected from the group consisting of sodium chlorate, potassium chlorate, sodium bromate, potassium bromate, sodium chlorite, potassium chlorite, and mixtures thereof.

Claims 22-26. (Canceled)

27. (Currently amended) A process for the preparation of a water-absorbent polymer, the process comprising

(I) polymerizing a polymerization mixture comprising:

(a) one or more ethylenically unsaturated carboxyl-containing monomers.

(b) one or more crosslinking agents,

(c) optionally one or more comonomers copolymerizable with the carboxyl-containing monomer, and

(d) a polymerization medium, and to form a crosslinked hydrogel,

(II) comminuting the hydrogel to particles; and

(III) drying the hydrogel particles at a temperature of ~~greater than~~ from about 105°C to about 180°C to form water-absorbent dried polymer particles and;

(IV) heat treating the dried water-absorbent polymer particles at a temperature of from about 180°C to about 250°C for a time period of from 1 to 60 minutes;

wherein, under conditions sufficient to reduce the residual monomer level in the polymer product, the following are independently added to the process prior to substantial drying of the hydrogel in step (III): (a) 1 to about 3 ppm, based on the weight of monomers (a), (b), and (c), of Fe(III) ions; and (b) at least one chlorine- or bromine-containing oxidation agent.